

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
27 October 2005 (27.10.2005)

PCT

(10) International Publication Number  
**WO 2005/100105 A1**

(51) International Patent Classification<sup>7</sup>: **B60R 22/10, B60N 2/28**

(21) International Application Number:  
**PCT/BR2004/000195**

(22) International Filing Date: 7 October 2004 (07.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PI 0401591-6 15 April 2004 (15.04.2004) BR

(71) Applicants: **UNIVERSIDADE ESTADUAL DE CAMPINAS - UNICAMP** [BR/BR]; Cidade Universitária "Zeferino Vaz", Distrito de Barão Geraldo, 13084-971 Campinas - SP (BR). **SAFE KID INDÚSTRIA E COMÉRCIO LTDA.** [BR/BR]; Av. Carmita Rsende Porto, s/n, sala 05, Conjunto Industrial, 75250-000 Senador Canedo - Goiás (BR).

(72) Inventors; and

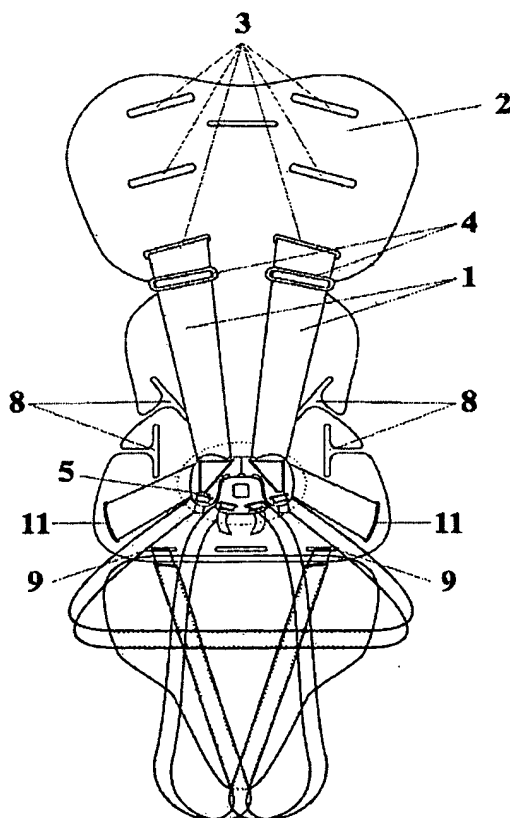
(75) Inventors/Applicants (for US only): **FONSECA DE ARRUDA, Antônio, Celso** [BR/BR]; Faculdade de Engenharia Mecânica - Unicamp, Distrito de Barão Geraldo, 13084-971 Campinas - SP (BR). **BUENO CAMARGO, Pelxoto** [BR/BR]; Rua 111, Qd. F35, Lt. 06, no.44, Setor Sul, 74085-130 Goiânia - Goiás (BR).

(74) Agent: **TOLEDO CORRÊA MARCAS E PATENTES S/C LTDA.**; Rua Ferreira Penteado, 709, 3° Andar - Centro, 13010-041 Campinas - SP (BR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

[Continued on next page]

(54) Title: RESTRAINT PLATE FOR HUMANS IN VEHICLES



(57) Abstract: Restraint plate for humans in vehicles, comprised of belts (1) that surround the shoulders and the waist of a child and which are sewn for maximum safety. The device is also comprised of a plate (2) for cervical protection, which should be attached to the car seat by the conventional seat belt that comes in the car and another belt (18) designed to secure the whole device to the car seat.



TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.